



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,458	11/05/2003	Ming-Hung Hsu	3313-1050P	6403
2292	7590	08/25/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			MORRISON, THOMAS A	
			ART UNIT	PAPER NUMBER
			3653	

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/700,458

Applicant(s)

HSU, MING-HUNG

Examiner

Thomas A. Morrison

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 5-10 and 15-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/05/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species II, illustrated in Figs. 5-6 in the reply filed on June 9, 2005 is acknowledged. The traversal is on the ground(s) that it should be no undue burden on the Examiner to consider all claims in the single application and that at least generic claim 1 should be in condition for allowance. This is not found persuasive because the instant application includes four (4) patentably distinct species that have substantially different structures and operating parameters. As such, searching for each of these patentably distinct species places an undue burden on the examiner. Applicant asserts in the June 9, 2005 response that all of the claims 1-20 read on the elected species II, illustrated in Figures 5-6. However, page 6 of the instant application discloses that the arm and spring are dispensed with in species II, illustrated in Figures 5-6. See page 6 at lines 10-11. As such, the claims directed to these limitations (i.e., claims 5-9 and 15-19) have been withdrawn from further consideration as being directed to a non-elected species. Moreover, the claimed straddle section set forth in claims 10 and 20 is associated with species III, illustrated in Figures 7-8. As such, the claims directed to this limitation (i.e., claims 10 and 20) have also been withdrawn from further consideration as being directed to a non-elected species.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-4 and 11-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. The claims contain numerous indefiniteness problems. For example, claim 1 recites "A paper feeding mechanism for supplying paper to a pickup roller to pick up". It is unclear what is picked up.

Also, claim 1 recites "means for driving the lifting plate, wherein the cam is turned to lift or lower the movable end of the lifting plate to change the relative distance and t a contact force between the paper held one the lifting plate and the pickup roller." Is the cam part of the means for driving the lifting plate?

Claim 1 recites "the paper" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites "the peripheral surface" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites "the movable end of the swing gear assembly" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites "the driving means" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claims 11-14 contain similar indefiniteness problems. The above indefiniteness problems are merely exemplary. Applicant should review the claims and make the language consistent throughout the claims.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 and 11-14, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,419,543 (Nakamura et al.). In particular, the Nakamura et al. patent discloses all of the limitations of claims 1-4 and 11-14.

Regarding claim 1, Figs. 1-2 show a paper feeding mechanism for supplying paper to a pickup roller (21) to pick up, comprising:

a swing gear assembly (including 62, 63 and 64) which includes a plurality of gears (62 and 64) and at least one linkage bar (63) and has one end fixed (i.e., one end of 63 is fixed to 62a) and other end swingable (i.e., other end of 63 and gear 64 are swingable) to transmit rotational driving power from a driving power source (51);

a lifting plate (11) for holding paper having one end fixed (near 12) and other end movable; and

a cam (including 14) selectively engaged with the swingable end of the swing gear assembly to rotate (i.e., 14 is selectively engaged with 64 of the swing gear assembly); and

means for driving the lifting plate (Figs. 1 and 2), wherein the cam (including 14) is turned to lift or lower the movable end of the lifting plate (11) to change the relative distance and a contact force between the paper held on the lifting plate and the pickup roller (21).

Regarding claim 2, the cam can be considered to include both 14 and 53. As such, Figs. 2 shows that the cam (including 14 and 53) has gear teeth formed on the peripheral surface thereof.

Regarding claim 3, the cam can be considered to include (14) and cam (14) is coaxial with a gear (53) and the movable end of the swing gear assembly (including gear 64 of the swing gear assembly) is selectively engaged with the gear (53).

Regarding claim 4, Fig. 1 shows that the driving means is to locate the cam (14) below the lifting plate (11), and to rotate the cam (14) to lift or lower the movable end of the lifting plate (11).

Regarding claim 11, Figs. 1-2 show a paper feeding mechanism for supplying paper to a pickup roller (21) to pick up, comprising:

a swing gear assembly (including 62, 63 and 64) which includes a plurality of gears 62 and 64) and at least one linkage bar (63) and has one end fixed (i.e., one end

of 63 is fixed to 62a) and other end swingable (i.e., other end of 63 and gear 64 are swingable) to transmit rotational driving power from a driving power source (51);

a lifting plate (11) for holding paper having one end fixed (near 12) and other end movable; and

a cam (including 14) selectively engaged with the swingable end of the swing gear assembly (i.e., 14 is selectively engaged with 64 of the swing gear assembly) and rotatable to lift or lower the movable end of the lifting plate (11) to change the relative distance and a contact force between the paper held on the lifting plate (11) and the pickup roller (21).

Regarding claim 12, the cam can be considered to include both 14 and 53. As such, Figs. 2 shows that the cam (including 14 and 53) has gear teeth formed on the peripheral surface thereof.

Regarding claim 13, the cam can be considered to include (14) and cam (14) is coaxial with a gear (53) and the movable end of the swing gear assembly (including gear 64 of the swing gear assembly) is selectively engaged with the gear (53).

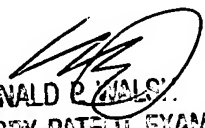
Regarding claim 14, Fig. 2 shows that the cam (14) is located below the lifting plate (11) such that the movable end of the lifting plate (11) is lifted or lowered when the cam (14) rotates.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on (571) 272-6944. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DONALD P. WALSH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600